

## REMARKS

Applicants will address each of the Examiner's rejections in the order in which they appear in the Office Action.

### Claims Rejections - 35 USC §102

The Examiner has the following rejections under 35 USC §102:

- (A) Claims 1-11 and 58 are rejected under 35 USC §102(b) as being anticipated by Teramoto.
- (B) Claims 18 and 19 are rejected under 35 USC §102(b) as being anticipated by Yamazaki et al.
- (C) Claims 20 and 21 are rejected under 35 USC §102(b) as being anticipated by Teramoto.

Each of these rejections is respectfully traversed.

The present invention relates to a semiconductor device. The semiconductor device, as claimed, includes a silicon oxide nitride film formed over a substrate, and a semiconductor film formed over the silicon oxide nitride film. The silicon oxide nitride film has a ratio of the concentration of nitrogen to the concentration of silicon ranging from 0.3 to 1.6 or a ratio of the concentration of oxygen to the concentration of silicon of from 0.1 to 1.7. Applicants have now amended the independent claims to recite that the silicon oxide nitride film has a refractive index of from 1.5 to 1.8 to a wavelength of 623.8 nm. It is respectfully submitted that such a semiconductor device is not disclosed or suggested by the cited references.

More specifically, Iyer discloses using ARC (antireflective coating). See p. 8. The reference states that the ARC may be a silicon-rich oxynitride. The reference further states that suitable ARC materials generally have an index of refraction of about 1.7 to about 3.0 at a wavelength of about 248 nanometers. See p. 9 of Iyer.

In contrast, the independent claims of the present application recite that the silicon oxide nitride film has a refractive index of from 1.5 to 1.8 to a wavelength of 623.8 nm. This is shown, for example, on page 5 of the specification of the present application. As this feature is not disclosed or suggested by Iyer, the reference cannot anticipate the claimed invention, and the claims are patentable thereover.

The other cited §102 references, Teramoto and Yamazaki, do not disclose or suggest any refractive index of a silicon oxide nitride film. Hence, the claims are patentable over these references.

Accordingly, it is requested that these rejections be withdrawn.

Claims Rejections - 35 USC §103

The Examiner also has the following rejections under 35 USC §103(a):

- D. Claims 4 and 11 are rejected as being unpatentable over Iyer et al.
- E. Claims 7 and 8 are rejected as being unpatentable over Iyer et al.
- F. Claim 9 is rejected as being unpatentable over Iyer et al.
- G. Claims 18 and 19 are rejected as being unpatentable over Iyer et al. in view of Van der Groen et al.
- H. Claims 20, 14-17 and 21-57 are rejected as being unpatentable over Iyer et al. in view of Van der Groen et al.

Each of these rejections is also respectfully traversed.

As explained above, Iyer does not disclose or suggest the claimed invention. The other cited reference, Van der Groen, does not suggest any refractive index of a silicon oxide nitride film. Hence, the claims are patentable over these references.

Accordingly, it is requested that these rejections be withdrawn.

• Conclusion

For at least the above-stated reasons, the claims of the present application are patentable over the cited references and should be allowed.

If any further fee is due for this amendment, please charge our deposit account 50/1039.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,



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